

WHAT IS CLAIMED IS:

1 A method of manufacturing the semiconductor device comprising:

arranging at least a part of a portion of a lead frame  
5 that is to be sealed with a resin, and a portion that is  
to become an outer lead, respectively, in a cavity of a metal  
mold;

filling a sealing resin into the cavity of said metal  
mold, and hardening the sealing resin; and

10 removing a member covering a surface layer region of  
the section, to become the outer lead, of said lead frame.

2. The method of manufacturing the semiconductor device  
according to claim 1, wherein

15 a plurality of semiconductor device constituent  
sections are arranged in a common cavity of said metal mold  
on said lead frame.

20 3. A method of manufacturing the semiconductor device  
comprising:

fixedly attaching removable members to both sides of  
a section, to become an outer lead, of a lead frame;

arranging a section, to be sealed with a resin, of  
said lead frame including said removable members in a cavity  
25 of a metal mold;

filling a sealing resin into the cavity of said metal mold, and hardening the sealing resin;

forming a groove ranging from a surface of said sealing resin to edges of said removable members; and

5 removing a member covering the section to become said outer lead, with the portion in which said groove is formed set as a boundary.

4. The method of manufacturing the semiconductor device  
10 according to claim 3, wherein

bonding sheets having removability with respect to the section to become said outer lead are employed as said removable members.

15 5. The method of manufacturing the semiconductor device according to claim 3, wherein

spacers detachable from the section to become said outer lead are employed as said removable members.

20 6. The method of manufacturing the semiconductor device according to claim 3, wherein

spacers each having a removable bonding surface formed between each spacer and the section to become said outer lead, are employed as said removable members.

7. The method of manufacturing the semiconductor device according to claim 5, wherein

if said lead frame is arranged in the cavity of said metal mold, said spacers are abutted on inner wall surfaces  
5 of the cavity.

8. The method of manufacturing the semiconductor device according to claim 6, wherein

if said lead frame is arranged in the cavity of said  
10 metal mold, said spacers are abutted on inner wall surfaces  
of the cavity.

9. The method of manufacturing the semiconductor device according to claim 3, wherein

15 a plurality of semiconductor device constituent sections are arranged in a common cavity of said metal mold on said lead frame.

10. A semiconductor device manufactured by:

20 arranging at least a part of a portion of a lead frame that is to be sealed with a resin, and a portion that is to become an outer lead, respectively, in a cavity of a metal mold;

filling a sealing resin into the cavity of said metal  
25 mold, and hardening the sealing resin; and

removing a member covering a surface layer region of  
the section, to become the outer lead, of said lead frame.

11. A semiconductor device manufactured by:

5 fixedly attaching removable members to both sides of  
a section, to become an outer lead, of a lead frame;

arranging a section, to be sealed with a resin, of  
said lead frame including said removable members in a cavity  
of a metal mold;

10 filling a sealing resin into the cavity of said metal  
mold, and hardening the sealing resin;

forming a groove ranging from a surface of said sealing  
resin to edges of said removable members; and

15 removing a member covering the section to become said  
outer lead, with the portion in which said groove is formed  
set as a boundary.